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(54) Title: RECEPTOR SPECIFIC BINDER DISCOVERY USING INTRAMOLECULAR ACYL MIGRATION INDUCED DYNAMIC CARBOHYDRATE LIBRARY

(57) Abstract: An efficient molecular evolution system was obtained by combining two novel approaches in the field, intramolecular acyl migration for DCL generation and boronic acid as a selector. 1,4-Di-O-benzoyl chiro-inositol in acetonitrile with DBU as a base generated a reversible equilibrium of 9 regiosomers. Only 3,4-di-O-benzoyl chiro-inositol, containing two sets of cis-diols, is most favored toward binding with phenyl boronic acid, and its percentage of the DCL composition was amplified by up to 82%.